

REMARKS

I. PENDING CLAIMS AND SUPPORT FOR AMENDMENTS

Upon entry of this amendment, claims 1-15 will be pending in this application.

Claims 6 and 8 have been amended to place them into independent form, which the Examiner has indicated will make them allowable. No new matter has been added.

II. REJECTION OF CLAIMS 1-4 AND 7

At page 2 of the Office action, the Examiner has rejected claims 1-4 and 7 under 35 U.S.C. § 103(a) as obvious over Booij et al. (U.S. Patent No. 5,840,773) in view of Parrinello et al. (U.S. Patent No. 5,605,935) and Bobe (GB Publication No. 1,552,626). Applicant respectfully traverses this rejection and requests reconsideration and withdrawal thereof.

The Examiner admits that Booij et al. do not disclose using their process for separating polyamides from carpet waste to separate and recover polyurethanes. In fact, the Examiner appears to recognize that Booij et al. do not even disclose floor coverings that contain polyurethane, since Booij et al. discloses only broadloom carpet. In an attempt to cure this deficiency, the Examiner turns to Bobe, which allegedly teaches floor coverings having a polyurethane backing. Since neither of these disclosures contain any motivation to adapt the process of Booij et al. to the floor coverings of Bobe, the Examiner turns to yet a third reference, Parrinello et al., which the Examiner alleges teaches a polyurethane recovery process.

Despite the Examiner's allegations, there remains no motivation, other than a hindsight reconstruction of Applicant's claims, to combine these isolated and unrelated reference teachings. First, as described above, Booij et al. describes

separation of nylon components from broadloom carpet. It does not teach or suggest that the process disclosed therein can or should be applied to more complicated laminated composite floor coverings, or that the process of Booij et al., if so applied, would allow the recycling of any polyurethane in the backing of such composites.

Second, Bobe simply discloses the existence of a back-coated floor covering. It does not contain any suggestion that the floor covering should or could be recycled, or that a process similar to that disclosed in Booij et al. or Parrinello et al. could successfully be applied to the polyurethane-backed floor covering disclosed in Bobe.

Third, Parrinello et al. is concerned with recycling flexible foams used in furniture cushioning, car seats, mattresses, and the like. The foams are not elements of laminated composite materials, as is the material of Bobe. None of the three cited references provides the slightest indication that combination of the glycolysis technique of Parrinello et al. would be useful if applied to the much more complex recycling problem of separating and recycling the components of a complicated laminated composite having multiple layers. For example, there is no indication or suggestion that the glycolysis process of Parrinello et al. is compatible with the alcohol dissolution process of Booij et al., such that the processes could be performed at the same time, or even sequentially. In addition, there is no indication that the glycolysis process disclosed by Parrinello et al. is compatible with the nylon-containing face cloth or with the other components (fillers, precoat layers, plasticizers, and the like) found in a typical carpet tile floor covering of the type found in Bobe.

In particular, with respect to claim 4, the existence of a precoat layer in Bobe, rather than making claim 4 obvious, serves to further illustrate the lack of motivation

to combine the reference teachings. Nowhere in either Booij et al. or Parrinello et al. is there any suggestion that either process is compatible with the precoat, and will not extract or react with the precoat components instead of the desired target material (nylon in Booij et al. and polyurethane in Parrinello et al.).

III. REJECTION OF CLAIM 5

At page 4 of the Office action, the Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as obvious over Booij et al., Bobe, Parrinello et al., and adding a fourth reference, Terry et al. (U.S. Patent No. 5,096,764). Applicant respectfully traverses this rejection and requests reconsideration and withdrawal thereof.

Recognizing that neither of the first three references suggest that a urethane-modified bitumen layer can be recycled, the Examiner turns to yet a fourth reference, Terry et al. While Terry et al. teach the existence of urethane-modified bitumen backings in floor coverings, neither it nor the other three references contain any suggestions about how such backings can or should be recycled. Certainly there is no indication in Parrinello et al. or in Terry et al. that the process of Parrinello et al. would be suitable for a urethane-modified bitumen, or that the Parrinello et al. process could be adapted to be so applicable. Again, the Examiner is using a hindsight reconstruction of Applicant's claimed invention as a substitute for finding motivation in the reference teachings. This is not the standard of obviousness under 35 U.S.C. § 103(a). In addition, Terry et al. does not cure any of the deficiencies of the other three cited references described above.

CONCLUSION

For the reasons set forth above, Applicant respectfully submits that all of the claims are in condition for immediate allowance, and an early notification thereof is respectfully requested. If the Examiner has any questions, or if any issues remain to be resolved, the Examiner is respectfully requested to contact the undersigned prior to the issuance of any final Office action, so that an attempt at resolving any such issues can be made.

The Commissioner is hereby authorized to charge any deficiencies or credit any overpayment to Deposit Order Account No. 11-0855.

Respectfully submitted,



Bruce D. Gray
Reg. No. 35, 799

KILPATRICK STOCKTON LLP
Suite 2800, 1100 Peachtree Street
Atlanta, Georgia 30309-4530
(404) 815-6218